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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/510,438	02/21/2000	Takashi Kohashi	450108-02349	1926

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EXAMINER

GURSHMAN, GRIGORY

ART UNIT	PAPER NUMBER
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2132

10

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/510,438

Applicant(s)

KOHASHI ET AL.

Examiner

Grigory Gurshman

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Referring to the rejection of claims 1-18, applicant argues that examiner has not set forth a reference that depicts the control means for controlling the size of an embedding part for each of the electronic watermark information according to the significance degree of the information. Examiner respectfully disagrees and points out that, Vynne teaches the watermark embedding system (218) and the signal (213) from the video source(212) and the control signals 217 and 219. The control signal affects the size of the watermark. Vynne shows the use of watermarks of a different size on the different frames (see Fig.), but does not explicitly teach controlling the size of the embedding part of the watermark. Cohen teaches the use of a variable watermark (WM), which is indicative of a desired length of buffer 40. The WM is preferably changed responsive to one or more parameters relating to a status of the buffer and/or the data flow in network 26 (see column 6, lines 6-20 and Fig. 4, blocks 108 and 104). Therefore, examiner maintains that the combination of references depicts the claimed invention, because one of ordinary skill in the art would have been motivated to generate an electronic watermark and control the size of the watermark based on the parameters (i.e. additional information) as taught in Cohen for adjusting the buffer size (see Cohen, Fig.4).
2. Applicant also argues that examiner does not indicate that the combination of references teaches the *precise language* of the claimed invention. Examiner agrees, but points out that the prior art in order to be applied in the rejection does not have to teach

the precise language of the Applicant's claims. The rejection is valid as long as the prior art of record reads on the claims on its' merit, while the broad but reasonable interpretation of claim language is applied.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1- 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vynne (U.S. Patent No. 5.960.081) in view of Cohen (U.S. Patent No. 6.389.032 B1).

5. Referring to the instant claims, Vynne discloses embedding a digital signature in a video sequence (see title and abstract). Vynne teaches a method and apparatus for watermarking digital video material by embedding a digital signature (see abstract). Vynne teaches a system and method for embedding a retrievable watermark into a video signal are provided, wherein the video signal provides a series of video frames including a first frame and a subsequent second frame. The method includes the steps of detecting a change between the first frame and the second frame; producing change information based on the change, and encoding the watermark into the change information (see column 2, lines 56-63).

6. Referring to the independent claims 1, the limitation "plural pieces of additional information" is met by the signature (217 in Fig. 2.2) and the secret key (219 in Fig. 2.2).

The limitation “electronic water mark information generating means for converting the plural pieces of additional information into electronic watermark information” is met by compression system (214 in Fig. 2.2). The limitation “embedding means for embedding the electronic watermark information in the signal based on the control signal” is met by watermark embedding system (218) and the signal (213) from the video source (212) and the control signals 217 and 219.

7. Vynne shows the use of watermarks of a different size on the different frames (see Fig.), but does not explicitly teach controlling the size of the embedding part of the watermark. Referring to the instant claims, Cohen discloses the internet voice transmission (see abstract). Cohen teaches the use of a variable watermark (WM), which is indicative of a desired length of buffer 40. The WM is preferably changed responsive to one or more parameters relating to a status of the buffer and/or the data flow in network 26 (see column 6, lines 6-20 and Fig. 4, blocks 108 and 104).

Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the system of Vynne in such a way that an electronic watermark is generated from the plural pieces of additional information and the size of the watermark is changed responsive to one or more parameters relating to a status of the data flow as taught in Cohen. One of ordinary skill in the art would have been motivated to generate an electronic watermark and control the size of the watermark based on the parameters (i.e. additional information) as taught in Cohen for adjusting the buffer size (see Cohen, Fig.4).

8. Referring to claims 2, 6, 10 and 13, Vynne teaches that the electronic watermark is embedded within a one-frame screen (see Fig. 3.5).

9. Referring to claims 3,4,7,8 and 14, it is well known in the art to assign a different significance degree to the watermark of a larger size. It would have been obvious to one of ordinary skill in the art to use a watermark of higher significance degree for a larger number of frames for protection of larger amount of significant information.

10. Referring to claims 9, 10 and 11, Vynne teaches the detecting means for detecting the watermarks - see retriever in Fig. 4.9B. The limitation "detection timing signal" is met by criteria signal in Fig. 4.9B.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grigory Gurshman whose telephone number is (703) 306-2900. The examiner can normally be reached on 9 AM-5:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

April 30, 2004
GG



Grigory Gurshman
Examiner
Art Unit 2132


GILBERTO BARRÓN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100